

Data Processing Results

Data File Name : DATA_004
 Folder : 040806
 Sample Name : Stabilite 4
 Sample ID :
 Sample Position : 1
 Injection Size : 0.0000
 Sample Type : Sam
 Method : CO2-STAB
 Batch Name : 040806
 RunTime User : micromass
 Acquisition Time : 10:57:40 Date : 04/08/06
 Current Time : 11:15:20 Date : 05/05/07

Analysis of Reference Gas Data

Ref Delta 13 = -34.50 Ref Delta 18 = -19.30

Time	Major	Ratio 2/1	Ratio 3/1
42.5	8.426E-8	1.1781E-2	4.2541E-3
102.5	8.413E-8	1.1781E-2	4.2541E-3
162.5	8.397E-8	1.1781E-2	4.2538E-3
222.6	8.358E-8	1.1781E-2	4.2537E-3
282.6	8.378E-8	1.1781E-2	4.2534E-3
342.7	8.406E-8	1.1780E-2	4.2530E-3
402.6	8.377E-8	1.1780E-2	4.2527E-3
462.7	8.380E-8	1.1779E-2	4.2527E-3
522.7	8.407E-8	1.1779E-2	4.2526E-3
582.7	8.494E-8	1.1778E-2	4.2527E-3

Std Dev Of Fit 2.6648E-7 1.8416E-7

Analysis of Sample Peaks, with Zero Subtraction

CO2

Time	Height	Area	2/1	3/1	CO13Pk	CO18Pk
------	--------	------	-----	-----	--------	--------

COPIE CERTIFIÉE
 CONFORME DES DONNÉES
 ET FORMULAIRES ORIGINAUX

Data Processing Results

Data File Name : DATA_005
 Folder : 040806
 Sample Name : Stabilite 5
 Sample ID :
 Sample Position : 1
 Injection Size : 0.0000
 Sample Type : Sam
 Method : CO2-STAB
 Batch Name : 040806
 RunTime User : micromass
 Acquisition Time : 11:08:45 Date : 04/08/06
 Current Time : 11:15:30 Date : 05/05/07

Analysis of Reference Gas Data

Ref Delta 13 = -34.50 Ref Delta 18 = -19.30

Time	Major	Ratio 2/1	Ratio 3/1
42.5	8.495E-8	1.1779E-2	4.2534E-3
102.5	8.499E-8	1.1779E-2	4.2535E-3
162.6	8.506E-8	1.1779E-2	4.2539E-3
222.6	8.502E-8	1.1779E-2	4.2538E-3
282.6	8.494E-8	1.1779E-2	4.2542E-3
342.6	8.489E-8	1.1779E-2	4.2543E-3
402.6	8.451E-8	1.1779E-2	4.2542E-3
462.7	8.487E-8	1.1779E-2	4.2543E-3
522.7	8.458E-8	1.1779E-2	4.2540E-3
582.7	8.439E-8	1.1779E-2	4.2538E-3

Std Dev Of Fit 1.7272E-7 2.7766E-7

Analysis of Sample Peaks, with Zero Subtraction

CO2

Time	Height	Area	2/1	3/1	dC13Pk	dO18Pk
------	--------	------	-----	-----	--------	--------

COPIE CERTIFIEE
 CONFORME DES DONNEES
 ET FORMULAIRES ORIGINALS

Data Processing Results

Data File Name : DATA_008
 Folder : 260606
 Sample Name : linearite 1
 Sample ID :
 Sample Position : 8
 Injection Size : 0.0000
 Sample Type : Sam
 Method : CO2-LIN
 Batch Name : 260606
 RunTime User : micromass
 Acquisition Time : 11:23:11 Date : 26/06/06
 Current Time : 11:15:42 Date : 05/05/07

Analysis of Reference Gas Data

Ref Delta 13 = -34.50 Ref Delta 18 = -19.30

Time	Major	Ratio 2/1	Ratio 3/1
42.5	2.876E-8	1.1790E-2	4.2592E-3
102.5	2.875E-8	1.1789E-2	4.2590E-3
162.5	1.082E-7	1.1792E-2	4.2579E-3
222.6	1.077E-7	1.1792E-2	4.2579E-3
282.6	7.264E-8	1.1791E-2	4.2585E-3
342.6	7.256E-8	1.1791E-2	4.2581E-3
402.6	1.704E-7	1.1792E-2	4.2571E-3
462.6	1.702E-7	1.1792E-2	4.2573E-3
522.7	2.668E-8	1.1788E-2	4.2588E-3
582.7	2.692E-8	1.1788E-2	4.2586E-3

9.3 nA
1.5 nA

Std Dev Of Fit 1.6725E-6 6.9427E-7

Analysis of Sample Peaks, with Zero Subtraction

CO2

Time	Height	Area	2/1	3/1	dC13Pk	dO18Pk
------	--------	------	-----	-----	--------	--------

COPIE CERTIFIÉE
 CONFORME DES TRANSMISSIONS
 ET DES ORIGINAUX

GDC01013

Data Processing Results

Data File Name : DATA_009
 Folder : 260606
 Sample Name : linearite 2
 Sample ID :
 Sample Position : 9
 Injection Size : 0.0000
 Sample Type : Sam
 Method : CO2-LIN
 Batch Name : 260606
 RunTime User : micromass
 Acquisition Time : 11:35:39 Date : 26/06/06
 Current Time : 11:15:54 Date : 05/05/07

Analysis of Reference Gas Data

Ref Delta 13 = -34.50 Ref Delta 18 = -19.30

Time	Major	Ratio 2/1	Ratio 3/1
42.6	2.687E-8	1.1788E-2	4.2591E-3
102.6	2.689E-8	1.1788E-2	4.2588E-3
162.6	1.089E-7	1.1792E-2	4.2581E-3
222.6	1.085E-7	1.1791E-2	4.2583E-3
282.6	6.987E-8	1.1791E-2	4.2588E-3
342.6	6.988E-8	1.1791E-2	4.2588E-3
402.7	1.763E-7	1.1792E-2	4.2572E-3
462.7	1.766E-7	1.1792E-2	4.2574E-3
522.7	2.703E-8	1.1788E-2	4.2594E-3
582.8	2.709E-8	1.1788E-2	4.2591E-3

5.8 nA
1.5 nA

Std Dev Of Fit 1.8697E-6 7.7341E-7

Analysis of Sample Peaks, with Zero Subtraction

CO2

Time	Height	Area	2/1	3/1	dC13Pk	dO18Pk
------	--------	------	-----	-----	--------	--------

COPIE CERTIFIÉE
 CONFORME DES DONNÉES
 ET FORMULAIRES ORIGINAUX

Data Processing Results

Data File Name : DATA_010
 Folder : 260606
 Sample Name : linearite 3
 Sample ID :
 Sample Position : 10
 Injection Size : 0.0000
 Sample Type : Sam
 Method : CO2-LIN
 Batch Name : 260606
 RunTime User : micromass
 Acquisition Time : 11:47:05 Date : 26/06/06
 Current Time : 11:16:30 Date : 05/05/07

Analysis of Reference Gas Data

Ref Delta 13 = -34.50 Ref Delta 18 = -19.30

Time	Major	Ratio 2/1	Ratio 3/1
42.5	2.718E-8	1.1788E-2	4.2594E-3
102.5	2.719E-8	1.1788E-2	4.2594E-3
162.5	1.074E-7	1.1791E-2	4.2579E-3
222.5	1.071E-7	1.1790E-2	4.2574E-3
282.6	6.932E-8	1.1789E-2	4.2568E-3
342.6	6.938E-8	1.1788E-2	4.2569E-3
402.6	1.790E-7	1.1790E-2	4.2559E-3
462.6	1.791E-7	1.1790E-2	4.2561E-3
522.7	2.856E-8	1.1787E-2	4.2571E-3
582.7	2.863E-8	1.1787E-2	4.2567E-3

Std Dev Of Fit 1.3543E-6 7.4675E-7

Analysis of Sample Peaks, with Zero Subtraction

CO2

Time	Height	Area	2/1	3/1	dC13Pk	dO18Pk
------	--------	------	-----	-----	--------	--------

COPIE CERTIFIÉE
 CONFORME DES DONNÉES
 ET FORMULAIRES ORIGINAUX

Data Processing Results

Data File Name : DATA_007
 Folder : 310706
 Sample Name : Linearite 1
 Sample ID :
 Sample Position : 1
 Injection Size : 0.0000
 Sample Type : Sam
 Method : CO2-LIN
 Batch Name : 310706
 RunTime User : micromass
 Acquisition Time : 11:58:36 Date : 31/07/06
 Current Time : 11:20:13 Date : 05/05/07

Analysis of Reference Gas Data

Ref Delta 13 = -34.50 Ref Delta 18 = -19.30

Time	Major	Ratio 2/1	Ratio 3/1
42.6	3.050E-8	1.1777E-2	4.2512E-3
102.6	3.050E-8	1.1777E-2	4.2511E-3
162.6	1.235E-7	1.1779E-2	4.2496E-3
222.6	1.230E-7	1.1778E-2	4.2498E-3
282.7	7.399E-8	1.1779E-2	4.2507E-3
342.7	7.403E-8	1.1779E-2	4.2508E-3
402.7	1.783E-7	1.1778E-2	4.2491E-3
462.7	1.775E-7	1.1779E-2	4.2493E-3
522.8	2.966E-8	1.1777E-2	4.2504E-3
582.8	2.978E-8	1.1776E-2	4.2505E-3

9.8 nA
1.6 nA

Std Dev Of Fit 1.1321E-6 7.4206E-7

Analysis of Sample Peaks, with Zero Subtraction

CO2	Height	Area	2/1	3/1	dC13Pk	dO18Pk
Time						

COPIE CERTIFIÉE
 CONFORME DES DONNÉES
 ET FORMULAIRES ORIGINAUX

147

Data Processing Results

Data File Name : DATA_008
 Folder : 310706
 Sample Name : Linearite 2
 Sample ID :
 Sample Position : 1
 Injection Size : 0.0000
 Sample Type : Sam
 Method : CO2-LIN
 Batch Name : 310706
 RunTime User : micromass
 Acquisition Time : 12:10:02 Date : 31/07/06
 Current Time : 11:21:03 Date : 05/05/07

Analysis of Reference Gas Data

Ref Delta 13 = -34.50 Ref Delta 18 = -19.30

Time	Major	Ratio 2/1	Ratio 3/1
42.6	3.001E-8	1.1777E-2	4.2512E-3
102.6	3.008E-8	1.1776E-2	4.2513E-3
162.6	1.317E-7	1.1779E-2	4.2502E-3
222.6	1.321E-7	1.1779E-2	4.2502E-3
282.6	7.124E-8	1.1778E-2	4.2515E-3
342.6	7.105E-8	1.1778E-2	4.2510E-3
402.7	1.844E-7	1.1778E-2	4.2492E-3
462.7	1.847E-7	1.1778E-2	4.2496E-3
522.7	2.984E-8	1.1776E-2	4.2522E-3
582.8	3.003E-8	1.1776E-2	4.2514E-3

ion A

i, 6 n A

Std Dev Of Fit

1.1051E-6

9.9158E-7

Analysis of Sample Peaks, with Zero Subtraction

CO2	Time	Height	Area	2/1	3/1	dC13Pk	dO18Pk
-----	------	--------	------	-----	-----	--------	--------

COPIE CERTIFIÉE
 CONFORME DES DONNÉES
 ET FORMULAIRES ORIGINAUX

Data Processing Results

Data File Name : DATA_009
 Folder : 310706
 Sample Name : Linearite 3
 Sample ID :
 Sample Position : 1
 Injection Size : 0.0000
 Sample Type : Sam
 Method : CO2-LIN
 Batch Name : 310706
 RunTime User : micromass
 Acquisition Time : 12:21:28 Date : 31/07/06
 Current Time : 11:21:45 Date : 05/05/07

Analysis of Reference Gas Data

Ref Delta 13 = -34.50 Ref Delta 18 = -19.30

Time	Major	Ratio 2/1	Ratio 3/1
42.6	2.990E-8	1.1775E-2	4.2506E-3
102.6	2.990E-8	1.1775E-2	4.2503E-3
162.6	1.350E-7	1.1777E-2	4.2498E-3
222.6	1.358E-7	1.1777E-2	4.2500E-3
282.7	6.976E-8	1.1777E-2	4.2511E-3
342.7	6.966E-8	1.1777E-2	4.2513E-3
402.7	1.818E-7	1.1777E-2	4.2496E-3
462.7	1.825E-7	1.1777E-2	4.2496E-3
522.8	2.940E-8	1.1776E-2	4.2525E-3
582.8	2.955E-8	1.1775E-2	4.2521E-3

10 nA
1.6 nA

Std Dev Of Fit 1.0203E-6 9.6752E-7

Analysis of Sample Peaks, with Zero Subtraction

CO2	Time	Height	Area	2/1	3/1	dC13Pk	dO18Pk
-----	------	--------	------	-----	-----	--------	--------

COPIE CERTIFIÉE
 CONFORME DES DONNÉES
 ET FORMULAIRES ORIGINAUX

149

Stable Isotope CF Analysis Results

File: DATA_007.raw
Project: controle2007.PRO
Sample list: 1504.spl
Line: 1
MS file: Co2 stab
Inlet: GC-combustion
Inlet file: Do Nothing
Sample ID:
Description: test de stabilite

Acquisition Date: 23-7-2006 10:53:36
Weight: 0.00
Injection Volume: 0
Bottle:
Type:
Standard:
Slot Number: JB 251
Run Index:

Reference standard					Corrections	
Species: CO2 by CF (uncalibrated)					Equilibrium correction: None	
Gas: CO2 Uncalibrated CO2						
Ratio type: Elemental						
Deconvolution: Craig						
Elemental delta						
Label:		Value:		Molecular delta		
Ratio 1: 13C		-34.5		delta 45 -32.93 PDB		
Ratio 2: 18O		-19.3		delta 46 -19.35 PDB		

Peak No	Major Height (nA)	RT (Sec)	Ratio 45/44	Ratio 46/44
1	4.71	122.6	1.1781E-02	4.2520E-03
2	4.72	182.6	1.1781E-02	4.2521E-03
3	4.72	242.7	1.1781E-02	4.2522E-03
8	4.68	2423.5	1.1781E-02	4.2522E-03
9	4.65	2483.6	1.1781E-02	4.2519E-03
10	4.67	2533.5	1.1781E-02	4.2522E-03

Mean: 1.1781E-02 4.2521E-03
Std Dev of fit (%): 0.01 0.04

Sample Data

Peak No	RT (Sec)	Major Height (nA)	Major Area	Ratio 45/44	Raw Delta	delta 13C	Ratio 46/44	Raw Delta	delta 18O	delta 18O w.r.t. SMOW
1	866.9	4.68	1.8814E-08	1.1824E-02	3.68	-30.02	4.1647E-03	-20.55	-39.48	-9.84
2	1229.7	4.66	3.3554E-08	1.1942E-02	13.71	-19.67	4.1654E-03	-20.39	-39.34	-9.70
3	1302.7	3.51	2.4451E-08	1.1785E-02	0.33	-33.47	4.1646E-03	-20.58	-39.60	-9.86
4	1474.1	3.06	2.8029E-08	1.1981E-02	17.02	-16.25	4.1652E-03	-20.43	-39.39	-9.75

COPIE CERTIFIÉE
CONFORME DES DONNÉES
ET FORMULAIRES ORIGINAUX

05/05/2007 11:52

Results for CO2 by CF (uncalibrated)(Fn1) [Printout]

1 of 1

GDC01019

150

Stable Isotope CF Analysis Results

File: DATA_008.raw	Acquisition Date: 23-7-2006 11:40:11
Project: controle2007 PRO	Weight: 0.00
Sample list: 1604.spl	Injection Volume: 0
Line: 1	Bottle:
MS file: Co2 stab	Type:
Inlet: GC-combustion	Standard:
Inlet file: Do Nothing	Slot Number: JB 251
Sample ID:	Run index:
Description: test de stabilite	

Reference standard					Corrections
Species: CO2 by CF (uncalibrated)					Equilibrium correction: None
Gas: CO2 Uncalibrated CO2					
Ratio type: Elemental					
Deconvolution: Craig					
Elemental delta		Molecular delta			
Label:	Value:	Label:	Value:	wrt:	
Ratio 1: 13C	-34.5	delta 45	-32.93	PDB	
Ratio 2: 18O	-19.3	delta 46	-19.35	PDB	

Peak No	Major Height (nA)	RT (Sec)	Ratio 45/44	Ratio 46/44
1	4.72	122.6	1.1780E-02	4.2523E-03
2	4.72	182.6	1.1781E-02	4.2525E-03
3	4.72	242.6	1.1781E-02	4.2529E-03
19	4.69	2423.6	1.1783E-02	4.2538E-03
20	4.68	2483.5	1.1782E-02	4.2534E-03
21	4.71	2533.5	1.1782E-02	4.2538E-03

Mean: 1.1782E-02 4.2531E-03
Std Dev of fit (%): 0.05 0.06

Sample Data

Peak No	RT (Sec)	Major Height (nA)	Major Area	Ratio 45/44	Raw Delta	delta 13C	Ratio 46/44	Raw Delta	delta 18O	delta 18O w.r.t. SMOW
1	788.2	0.96	4.7096E-09	1.1835E-02	12.97	-20.46	4.1699E-03	-19.56	-38.54	-8.86
2	797.3	19.72	1.1594E-07	1.1619E-02	-13.81	-50.34	4.4587E-03	47.64	27.49	59.20
3	827.5	0.94	3.0002E-09	1.1802E-02	1.69	-32.08	4.1662E-03	-20.42	-39.35	-9.71
4	867.3	5.92	2.3297E-08	1.1798E-02	1.41	-32.35	4.1644E-03	-20.86	-39.78	-10.15
5	875.3	1.01	6.4824E-09	1.1887E-02	8.94	-24.58	4.1658E-03	-20.58	-39.52	-9.88
6	898.1	0.41	3.1886E-09	1.1869E-02	7.42	-26.17	4.1676E-03	-20.10	-39.05	-9.40
7	1042.1	0.44	1.8833E-09	1.2030E-02	21.09	-12.11	4.1743E-03	-18.53	-37.53	-7.83
8	1045.4	0.44	2.2601E-09	1.1693E-02	-7.55	-41.57	4.1602E-03	-21.85	-40.73	-11.13
9	1182.7	2.33	1.5952E-08	1.1847E-02	5.55	-28.10	4.1663E-03	-20.41	-39.35	-9.71
10	1244.7	6.80	5.7463E-08	1.1854E-02	6.13	-27.47	4.1637E-03	-21.01	-39.94	-10.32
11	1306.3	2.14	1.4527E-08	1.1840E-02	4.99	-28.67	4.1659E-03	-20.51	-39.45	-9.80
12	1336.9	1.26	9.0473E-09	1.1860E-02	6.08	-26.95	4.1670E-03	-20.24	-39.19	-9.54
13	1376.1	3.44	3.4841E-08	1.1689E-02	7.38	-26.20	4.1658E-03	-20.54	-39.43	-9.83
14	1651.7	0.46	3.7478E-09	1.1863E-02	8.89	-26.70	4.1646E-03	-20.80	-39.74	-10.10
15	1695.0									

COPIE CERTIFIEE
CONFORME DES DONNEES
ET FORMULAIRES ORIGINAUX